THE ONTARIO MENTAL HEALTH FOUNDATION

LA FONDATION ONTARIENNE DE LA SANTE MENTALE

ANNUAL REPORT 1990/91

92-01699/

ONTARIO MENTAL HEALTH FOUNDATION

LA FONDATION ONTARIENNE DE LA SANTE MENTALE

ANNUAL REPORT 1990/91

CONTENTS

1. Report from the chair:
2. Members and staff of the Foundation
3. Objectives & programmes
4. Report on the scientific work of the Foundation
5. Members of peer-review committees:
   - Research grants
   - Fellowships
   - MCSS / Alzheimer
   - Ontario Health Survey
6. Project Research Grants and Fellowships
7. Financial statements
8. Donors

365 Bloor Street East, Suite 1708
Toronto, Ontario M4W 3L4
(416) 920-7721

REPORT FROM THE CHAIRMAN

As Chairman I am pleased to be able to report on the activities of a hard working and conscientious Board. The group who now comprise the members of the Foundation represent a cross-section of the community which provides one of the strengths required for the effective working of the Board. The fact that I can count upon the expression of a number of different points of view about leading issues and upon a wide range of expertise makes it a pleasure to serve as Chairman. In addition, I should note that, when different points of view are expressed, they are put forward in a way which leads to constructive resolution of differences. In the past year the Foundation has canvassed widely in looking for new members; the names we have put forward for additions to the Board we believe meet with the intentions of the Government of Ontario to have the boards of agencies constituted in a way which does justice to the diversity of interests and individuals found within our Province. We note, in particular, the welcome reappointments: Mrs. Rita Lajoie and Dr. Andrea Baumann to the Foundation; and Mrs. Iris Owen to the Board of Trustees of the Clarke Institute of Psychiatry.

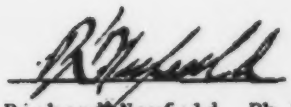
The Foundation is indebted to the hard working peer-review committees which carry out the examination of all the applications for grants and fellowships which come to the Foundation each year. In particular the Foundation recognizes the work of two who hold the Chairs of the committees: Dr. Jane Rylett and Dr. Candace Gibson. The members of the Foundation who have attended the peer-review committee meetings have reported to the Board that the work is arduous but is done carefully and enthusiastically.

The merit of the work which the Foundation selects for support is attested by the fact that the investigators report their projects in leading journals. The range of work supported is directed to a wide variety of mental disorders. Last year the Foundation received a large number of applications for Research Grants and that the quality of the applications was thought to be high. The committees have been obliged to develop ways to reduce the workload of individual members which, at the same time, ensure the peer-review is fair and thorough.

The Foundation wishes to put on record its regret that the research competition which the Foundation organized on behalf of the Ministry of Community and Social Services will not be continued. This competition was important because it directed grants towards a variety of objectives; some are less "fashionable" e.g. developmental disabilities, than other fields of research; and others will grow in importance because the demographies of the Ontario population tell us that the problems of ageing will become more common. We hope that in future years the Ministry will again allocate funds to investigator-driven work on these important problems; and in the meantime we wish to put on record that the Foundation has been pleased to contribute to this research effort by organizing the peer-review and the management of approved grants.

The Foundation during the past year has reviewed its relations with the other bodies in the Province and in particular the Clarke Institute of Psychiatry. The relationship the Foundation has to teaching hospitals and universities is an important issue to us and it is one we propose to discuss further to ensure that the Foundation is genuinely useful to all the institutions in the Province where research can be carried on - and in particular to institutions which to the present have not fully entered the research stream.

The Foundation has come to a time when a review of its work is in order. To this end we have taken steps to organize an internal review to be directed by members of the Board and by researchers; this will be followed promptly by an external review which we hope will take place during the Winter and Spring of 1992/93. We look forward to the results of both the internal and the external reviews as a means of refining and improving the work of the Foundation.



Richard Neufeld, Ph.D.
Chairman September 1991

THE ONTARIO MENTAL HEALTH FOUNDATION

Established by Special Act of Legislature of the Province of Ontario, 1960-61.

Members as at March 31, 1991

Richard Neufeld, Ph.D.
Chairman, London

Rita Chrolavicius, LL.B.
Vice-Chairman, Toronto

Joseph Aziz, B.A.
Toronto

Andrea Baumann, R.N.
Ph.D., Hamilton

Pierrette Beaudoin
L'Orignal

James Chacko, Ph.D.
Windsor

Lai Chu, B.A.
Agincourt

Peter Ferreira, B.A.
Mississauga

Russell Jacobson, B.S.,B.A.
North York

Rita Lajoie, B.A.
Timmins

Yvon Lapierre, M.D.
Ottawa

Iris Owen, R.N.
Toronto

Rochelle Reingold
Richmond Hill

Staff

Dugal Campbell, Ph.D.
Executive Director

Anita Macatangay

Jessie Paterson

Audrey Stefanovich

Isabelle St-Denis

OBJECTIVES OF THE FOUNDATION

In 1988 the Foundation approved the following statement:

> The objectives of the Foundation shall be: first, to support research which will improve and enlarge the knowledge required to promote mental health and to prevent, treat and cure mental disorders; second, to collect information about mental illness, and the sciences bearing upon mental illness, so that the Foundation may actively plan programmes which will maximise the benefits to be expected from the funds available to it; third, to provide information to practitioners so that knowledge generated by investigation is promptly disseminated and used; and fourth, to communicate the results of research to the general public in order to develop an understanding of the value of research in improving the treatment of the mentally ill.

THE FOUNDATION'S PROGRAMMES

To realise these objectives the Foundation provides funds to a number of programmes. The programmes have been planned with the following general principles in view:

1. The first criterion in awarding funds will be the scientific quality of the proposed work. The best interests of the Foundation and the public will be served only if excellent applications for awards come forward, and from a wide range of research interests.

2. Given the limits of the Foundation's resources, and the many aspects of mental disorder, the Foundation can serve the Province best by promoting work on a broad range of topics. Therefore, the Foundation should not be identified with any one research focus.

3. In scientific research, one aims at a moving target. The Foundation should, therefore, adopt policies that permit changing the mix of research and allow new investigators to enter the field.

The Foundation will support research work which deals with any of the biological, psychological or social factors which either foster mental health or lead to mental illness. The Foundation aims to improve knowledge about the prevention of mental disorder, and the rational and efficient diagnosis, treatment and rehabilitation of the mentally ill. The Foundation will accept applications dealing with any period of the life-span, any of the factors thought to cause psychopathology, and from any of the relevant scientific specialties. The Foundation has a particular interest in studies which address mental health problems of importance in Ontario.

The Foundation offers: 1) fellowships to those who wish to do research bearing on mental health; and 2) support for research projects undertaken by investigators in the field of mental health. There is also a limited programme of support for conferences and publications.

HOW TO APPLY FOR GRANTS

Guidelines for applicants and application forms are distributed to the research offices of universities and hospitals in Ontario. They are sent to individuals on request from the Foundation; call: (416) 920-7721.

REPORT ON THE SCIENTIFIC WORK OF THE FOUNDATION

In the year 1990-91 the Foundation continued its two major regular programmes of support for project research grants and research fellowships. The number of research grants supported during the year was 41; the number of fellows supported during the year was 30. The Foundation also provided 3 grants for the purchase of equipment. Eighteen research project grants were made using funds provided by the Ministry of Community and Social Services.

The new programme introduced by the Foundation in 1988, which initiated the Senior Research Fellow and the New Faculty Research Fellow awards has been in place for three years. These new awards are attracting applications from well qualified applicants. In addition the junior awards (Post-Doctoral Research Fellow) are attracting applications from candidates who have completed a professional training and wish to embark on a research career.

At the Fall deadline an unusually large number of grant application was received from applicants who were seeking funding for the next year (1991-92). The number of applications to be reviewed imposed a heavy burden on the members of the research committee. A sub-committee of the main peer-review committee was struck to consider ways to make the work less onerous for the committee members which would also ensure that the process was fair and objective so that applicants could have confidence that their grants were being fully reviewed. The committee concluded that the Foundation's commitment to careful review of each application could be maintained by an enlargement of the review committee and by more disciplined discussion during the meeting.

The Fellowships committee recommended adjustment of the junior fellowships awards to make clear that they were intended to encourage not only the "standard" post-doctoral fellow (i.e. a basic scientist who has completed the doctoral degree) but also applicants who have completed a professional training (such as the F.R.C.P. (C) or M.S.W.) and who wish to take further research training. Alterations in the terms of reference were agreed to express these ideas and will appear in the 1991-92 edition of the Foundation's guidelines.

A major project for the Foundation during the year 1991 has been planning and managing the Ontario Mental Health Survey (or the Ontario Health Supplement as it is now called). The Foundation had set up an advisory board under the Foundation's vice-chairman, Ms. Rita Chrolavicius to supervise this project. The advisory committee is comprised of representatives of bodies who will have an interest in data arising from an epidemiological survey of psychiatric disorder in the province of Ontario (e.g. the Ministry of Health; the Ontario Medical Association) and epidemiologists who can give advice on technical aspects of the survey. The survey is managed by a working party (Chairman: Dr. D. R. Offord, Department of Psychiatry, McMaster University) with members from McMaster University, the Clarke Institute of Psychiatry, the Ministry of Health and the Foundation. During the year the working party met weekly and has carried out a number of tasks. The first major task was preparing a questionnaire and a sampling frame work which would enable an estimate to be made of the presence

of major psychiatric disorders in Ontario. The working party chose the Composite International Diagnostic Inventory (C.I.D.I.) which is the World Health Organization revision of the D.I.S. questionnaires which were used in the Epidemiological Catchment Area studies in the U.S. The working party, in collaboration with a group at the University of Michigan, modified the C.I.D.I. for use in North America and, in addition, devised additional portions for the questionnaire which will enable a number of issues about the provision of mental health services to be addressed: assessment of the risk factors which may lead to a mental disorder; assessment of disabilities which can be attributed to mental disorder; estimates of the utilisation of mental health services; major demographic variables; and questions about the occurrence of physical and sexual abuse in childhood. A pre-test of the questionnaire was carried out in Hamilton by 25 Statistics Canada interviewers in May 1990 using a sample of about 400 respondents. The results from the pre-test were used to improve the questionnaire and to test the training method developed for the interviewers.

In November over 150 interviewers were trained to carry out the questionnaire and immediately thereafter the interviewing force entered the field and were active from the end of November till the middle of April. The final sample of respondents is expected to be about 10,000 and will include an over-sampling of young people between the age of 15 and 25.

The construction of the questionnaire, formatting, printing and translating the final version, the training of interviewers and the actual conduct of the survey have added up to make a substantial task. The Foundation is indebted to a large number of people who have contributed substantially to the successful execution of these tasks. The Foundation wishes to acknowledge, in particular, the members of the working party and their colleagues at Statistics Canada who put such an effort into the construction, printing and translation of the questionnaire and who organized a remarkably successful method of training interviewers. Special mention should be made of Mr. Gary Catlin, who, while he was seconded from Statistics Canada to the Ministry of Health, joined the working party and made a unique contribution of experience and enthusiasm to the design and management of the survey. It is clear from the response rate that the field work has been successful; the Foundation wishes to put on record its gratitude to the Statistics Canada Interviewers who completed their work during the winter and who managed to carry out interviews successfully using an interview form which, in the first instance, many of them found daunting. Their experience suggests that a successful instrument has been devised; the next task which awaits the working party is editing the data and analysis of the results.

The Foundation undertook in 1990-91 some other additional tasks which should be mentioned. The Ontario Health Supplement was given to a sample of respondent who had already taken part in a larger survey - the Ontario Health Survey. The Ministry of Health had put aside a sum of money so that investigators could apply for research grants to analyse data arising from the Ontario Health Survey. The ministry asked the Foundation to organize a peer-review of applications from investigators who proposed to work with data from the Ontario Health Survey. In the winter the Foundation convened a new peer-review committee (Chairman: Dr. A. S. McPherson, Education Centre for Aging and Health, McMaster University) which reviewed the 37 applications that had been sent in to the Ministry's

competition. The Foundation is grateful to the members of this review committee and wishes to acknowledge their assistance in carrying out a successful peer-review. The grants which were awarded as a result of this peer-review are being administered directly by the Ministry of Health.

The Foundation will administer in 1991-92 a number of grants which are to be funded with money provided by the Alzheimer Association of Ontario. The Alzheimer Association had requested the Foundation to carry out a peer-review of research grant applications directed to the diagnosis, treatment, and care of people suffering from Alzheimer's disease. This review was undertaken by the members of the peer-review committee (Chairman: Dr. V. Quinsey, Department of Psychology, Queen's University) which the Foundation had already convened to manage the Ministry of Community and Social Services competition which has been run during a number of recent years. The Alzheimer competition was successful; a number of research grant applications were received and three new grants were begun as a result of this competition. The Foundation hopes that this collaboration with the Alzheimer Association will continue.

The Foundation, during a number of recent years has managed a grants competition on behalf of the Ministry of Community and Social Services. The applications in the competition were directed towards developmental disabilities, physical handicaps, and problems of the elderly. It now appears that the competition will not be continued. The Foundation wishes to acknowledge that scientists have benefited from this collaboration with the Ministry of Community and Social Services and regrets that funds cannot be found to continue investigation of these topics - all of which merit investigation in view of the heavy burden of suffering caused by physical handicap, mental retardation and dementia.

MEMBERS OF THE FOUNDATION'S PEER-REVIEW COMMITTEES 1990/91

RESEARCH GRANTS COMMITTEE

R. Rylett, Ph.D. (Chair)	London
H. Anisman, Ph.D.	Ottawa
S. Black, M.D.	Toronto
P. Boksa, Ph.D.	Verdun, P.Q.
M. Boyle, Ph.D.	Hamilton
S. Burke, Ph.D.	Kingston
J. Holden, Ph.D.	Kingston
R. Joffe, M.D.	Toronto
D. Pepler, Ph.D.	North York
G. Rodin, M.D.	Toronto
S. Segalowitz, Ph.D.	St. Catharines
E. Stopa, M.D.	Syracuse, N.Y.
P. Szatmari, M.D.	Hamilton
G. Winocur, Ph.D.	Peterborough

FELLOWSHIPS COMMITTEE

C. Gibson, Ph.D. (Chair)	London
W. Avison, Ph.D.	London
A. Bassett, M.D.	Toronto
C. Cunningham, Ph.D.	Hamilton
S. George, M.D.	Toronto
B. Humphrey, M.D.	Gabriola, B.C.
J. Inglis, Ph.D	Kingston
B. Jones, M.D.	Ottawa
S. Kish, Ph.D.	Toronto
H. Szechtman, Ph.D.	Hamilton
S. Welner, Ph.D.	Montreal, P.Q.

MCSS/ALZHEIMER COMMITTEE

V. Quinsey, Ph.D. (Chairman)	Kingston
K. Graham, Ph.D.	London
E. Moore, Ph.D.	Kingston
K. Pautler, Ph.D.	Parry Sound
D. Pederson, Ph.D.	London
R. Schachar, M.D.	Toronto
F. Scott, M.D.	Hamilton
K. Shulman, M.D.	Toronto
K. Sturdy-Smith, B.A.	Guelph
L. Tuff, Ph.D.	Hamilton

HEALTH SURVEY COMMITTEE

A. MacPherson, M.D. (Chairman)	Hamilton
O. Adams, M.S.	Ottawa
M. Boyle, Ph.D.	Hamilton
A. Carswell-Opzoomer, Ph.D.	Ottawa
G. Catlin	Toronto
A. Clarke, M.B.	Toronto
A. Donner, Ph.D.	London
C. Greenwood, Ph.D.	Toronto
M. Kelley, M.S.W.	Thunder Bay
B. Kisilevsky, Ph.D.	Kingston
I. McDowell, Ph.D.	Ottawa

PROJECT RESEARCH GRANTS AND FELLOWSHIPS

The objectives of the Foundation cover the entire field of mental health. Basic studies, applied studies aimed at health promotion, the prevention of disorders, investigation of diagnosis, treatment and rehabilitation are all legitimate targets of investigation. The Foundation announces that it will accept applications from any of the scientific specialities dealing with mental disorder and will consider investigations treating all ages from infancy to senescence. Given this wide remit the peer-review committees which advise the Foundation have adopted the policy that the first criterion in making an award shall be the scientific merit of an application; as a second factor they consider the "priority" to be accorded each application by estimating the impact new knowledge may have upon the field of work and the burden of suffering whenever a particular disease is in view.

It may be helpful to investigators if they know the results of the peer-review expressed in terms of awards made to different kinds of work. The figures below divide the grants made by the Foundation into categories according to the nature of the investigation. The breakdown uses a variant of the classification scheme developed by the former Health Research and Development Council of Ontario. There are five broad divisions in this analysis, viz:

1. research aimed at the description of disorders (natural history; epidemiology); the development of measuring devices and tests;

2. the search for basic physiological, psychological or social mechanisms underlying normal or abnormal conduct (basic research) often using animal "models" or laboratory preparations;

3. research which tests explanations (physiological, psychological or social) for a particular disorder (applied basic research) often using patients as experimental subjects;

4. studies of diagnosis, treatment and rehabilitation of a disorder (clinical research);

5. studies of health services (operations research); studies aimed at health promotion and disease prevention; equipment grants.

An investigation may fit into more than one category and, as a consequence, some decisions are near-arbitrary; the tables below show the Foundation's work along this broadly conceived basic-to-applied continuum.

Research Grants

A) New applications: in the Fall of 1990 the Foundation received 106 applications for research grants and 6 applications for equipment grants; this number of applications was thought to be about the upper bound of what a committee of 14 persons can handle with full attention. The number of applications has increased over the last three years, as follows:

1988	91 project grants	11 equipment grants
1989	88 project grants	9 equipment grants
1990	106 project grants	6 equipment grants

B) Project grants: in the year 1990-91 the Foundation supported 41 research projects and made 3 grants for the purchase of major equipment; in addition 18 project grants were made using funds provided by the Ministry of Community and Social Services.

TABLE 1. Project grants shown by type of research and funding source:

	1989-90		1990-91	
	OMHF	MCSS	OMHF	MCSS
1. Description/measurement	4	5	6	3
2. Basic Research	13	2	9	1
3. Applied basic	19	8	15	5
4. Diagnosis/treatment	11	8	11	5
5. Service/health promotion	3	4	0	4
	50	27	41	18

Fellowships

A) New applications: in the Fall of 1990 the Foundation received 29 applications for fellowships, 2 applications for conference support, 1 application for publication support and 1 application for a "Sundry Award". Of the applications for fellowships 16 were approved for support, 1 Sundry award was approved and 2 conference awards were approved.

B) Fellowships: in the year 1990-91 the Foundation supported 30 fellows and senior investigators.

TABLE 2. Fellowships shown by type of research

	1989-90	1990-91
1. Description/measurement	4	0
2. Basic research	13	7
3. Applied basic research	12	14
4. Diagnosis/treatment	7	7
5. Service/health promotion	2	2
	38	30

RESEARCH GRANTS 1990-91

MCMASTER UNIVERSITY, HAMILTON

Dr. R. Carbotte **$ 44,218**

Studies of brain functioning in lupus patients without major neurological symptoms

Psychoneuroimmunology is an emerging field of study directed to the relations between the central nervous system and the immune system. This study has focussed on systemic lupus erethymetosis to show the effects of anti-bodies on the cognitive functioning of the central nervous system.

Dr. P. Chang **$ 58,059**

Cloning of a gene associated with neurodegeneration

Dr. Chang has isolated the cause of a neurodegenerative disorder. It is a deficiency in - arylsulfatase - A. Dr. Chang has now shown that not all individuals with the chemical deficiency suffer from the disorder. This investigation is designed to investigate what factors prevent some individuals who have the deficiency from exhibiting the symptoms of the disease.

Dr. D. Ciliska **$ 75,000**

Randomized trial of dieting versus non-dieting

Most weight-loss diets are successful in the short-term only and dieting is one of the factors which predispose people to develop eating disorders. This investigation will examine an alternative: a non-dieting psychoeducational intervention to control weight.

Dr. B. Levy **$ 53,468**

The training and generalization of reading related skills

The purpose is to investigate two remedial techniques that increase word-naming speed and the text-reading rate of poor readers in primary school classes. The techniques have been successful in the laboratory; the investigation is now being carried further to see if they will lead to methods useful in schools.

Dr. M. Mazurek **$ 36,827**

The neurochemistry of dementia: beyond the cholinergic hypothesis

Much of the current research effort on Alzheimer's disease supposes that Alzheimer's dementia is related to depletion of the cholinergic system. It is now known that other patients who have a reduction in cholinergic markers do not suffer from Alzheimer's disease. This finding challenges much of current thinking about Alzheimer's disease. Dr. Mazurek will examine the neurochemical pathology associated with the nondementing illness.

Dr. R. Mishra **$ 42,321**

Studies on the interaction of a hypothalamic factor (L-prolyl-L-leucyl-glycinamide) with biogenic amine receptors in CNS

This investigation is to gain a better understanding of the way in which L-prolyl-L-leucyl-glycinamide modulates dopamine (D_1 and D_2) receptors. The results of this study will further our knowledge of basic neuronal control mechanisms, and will have implications for the therapy of neurological disorders (such as Tardive dyskinesia and Parkinsonism) and relapse psychosis of schizophrenia.

Dr. L. Niles **$ 44,700**

Brain target sites for melatonin and n-acetyl-5-methoxy kynurenamine: modulation of gabaergic function and cyclic nucleotide synthesis

The pineal gland influences brain homeostasis, neurotransmitter function and eventually behaviour. This project is aimed at elucidating the

biochemical mechanisms which underline pineal-brain interaction.

QUEEN'S UNIVERSITY, KINGSTON

Dr. D. Benoit **$ 64,703**

Intergenerational transmission of attachment
Dr. Benoit will examine patterns of attachment formation across three generations. An examination will be made of attachment between mothers and infants, and mothers and grandmothers, to find out if attachment in the previous generation is an important factor in the formation of attachment in the current generation.

Dr. M. Handley-Derry **$ 55,388**

School achievement at age 9-10 years of a selected population of children at risk in the perinatal period
The purpose of this investigation is to establish the use for predicting academic achievement, in children 9 and 10 years of age, of data about fetal and newborn complications, motor and cognitive deficits at 1 year of age, and motor and cognitive and language deficits at 4 years of age, and measures of the home environment made at both 1 and 4 years of age.

Dr. J. Holden **$ 59,535**

The use of DNA markers in carrier assessment of the fragile-X syndrome and other forms of X-linked mental retardation
X-Linked mental retardation effects about one in every 500 males; about one in 200 females has a 50% chance of being a carrier for the disorder and about one-third of this group are known to have a disorder called the "Fragile-X Syndrome". The objective of the investigation is to find ways in which reliable determinations of the carrier status of females at risk of the disorder can be made and also to find ways of making a prenatal diagnosis of the syndrome.

Dr. J. Holden, **$ 9,260**
Dr. B. White

Beckman geneline transverse alternating field electrophoresis (TAFE) system -
A major equipment grant was made to Dr. Holden and Dr. White at Queen's University in order to purchase a Beckman Geneline Transverse Alternating Field Electrophoresis System. This equipment will be used in the investigation of the chromosome responsible for the Fragile-X Syndrome.

ST. JOSEPH'S HOSPITAL, LONDON

Dr. A. Stoessl **$ 45,062**

Peptide-dopamine interactions in ageing and tardive dyskinesia (TD)
The investigation is designed to find out what neurochemical mechanisms lead to the movement disorders found in patients treated with long-term neuroleptic drugs.

UNIVERSITY OF WESTERN ONTARIO, LONDON

Dr. D. Pederson **$ 47,985**

Antecedents of attachment security
Attachment is a central factor in the mental health of the infant and young child. Data on maternal stress, and on social support given to mothers, which may influence the formation of attachments, is needed to provide specific information about the way in which stress and support influences attachment formation.

ROYAL OTTAWA HOSPITAL

Dr. R. Bell **$ 12,408**

A pilot study of the effects of training in psychiatric rehabilitation skills on patient quality of life and measures of interagency cooperation
This investigation is a pilot study of a community action system focussed on

rehabilitation which aims to improve the quality of life of people who suffer from psychiatric disorders.

UNIVERSITY OF OTTAWA

Dr. J. de la Torre **$ 48,000**

Regional neuronal metabolism and behavioural changes after chronic brain ischemia
The two most common dementias are Alzheimer's disease and multi-infarct dementia; the latter disorder is treatable. The aim of this study is to arrive at a better understanding of multi-infarct dementia in an animal model with the idea of improving treatment in patients.

Dr. P. Ardina **$ 67,200**

Prospective dosing and plasma level - clinical effect relationship of antidepressants
The objective of the investigation is to determine, in a population of outpatients with unipolar endogenous depression, if there is a significant relation between blood levels of antidepressant drugs and clinical response. The drugs under examination, doxepin and imipramine, are widely used in the treatment of depression.

NORTH BAY PSYCHIATRIC HOSPITAL

Dr. P. Carlen,
Dr. M. P. McAndrews **$ 65,245**

Prevalence of dementia and its relation to alcoholism in an institutionalized population in Nipissing district
Two major objectives are in view: (1) the determination of the prevalence of dementia in an institutionalized rural population with a specific focus on the relation between dementia and alcohol use; and (2) to investigate the association between excessive alcohol use and dementia.

CLARKE INSTITUTE OF PSYCHIATRY, TORONTO

Dr. R. Joffe & Dr. J. Regan **$ 16,848**

Personality and depression
This investigation aims to assess the effect of depressed mood on a wide range of personality measures. In addition, the study will examine the changes that take place in personality when depression is successfully treated.

Dr. P. Li **$ 50,067**

Studies on the effect of lithium on CNS phosphoinositide second messenger system
The primary goal of this study is to explore intensively the interaction of lithium and other substances which are important in the treatment of manic-depressive disorder.

Dr. B. Toner **$ 36,688**

Cognitive-behavioural group therapy for irritable bowel syndrome
The main aim of this study is to evaluate the effect of a psychological therapy for the irritable bowel syndrome. The psychological therapy is to be compared with: i) a matched condition in which the patients are given attention only; and ii) conventional medical therapy.

HOSPITAL FOR SICK CHILDREN, TORONTO

Dr. J. Finegan **$ 8,976**

The development of a measure of difficult temperament in the school-age child
In recent years investigators have paid attention to the genesis of "temperament" and "personality" in young children. This investigation will develop a measure of "difficult" temperament in the school-age child which can be used as a basis for subsequent research.

Dr. S. Goldberg **$ 39,075**

Studies in developmental psychopathology: attachment and behaviour program in high risk populations
This investigation is a longitudinal study of children at risk for subsequent behaviour disorders (children with cystic fibrosis; children with congenital heart disease). The investigation is designed to find out if early difficulties in attachment formation can be related to behavioural problems later.

Dr. M. Lovett **$ 74,203**

Training and transfer effects in dyslexic children's response to remedial treatment
The investigation will address factors which influence improvement in reading in laboratory investigations. The improvement seen in the laboratory is not observed beyond the experimental situation; it is therefore important to find out how the techniques can be made available for classroom use.

ONTARIO INSTITUTE FOR STUDIES IN EDUCATION, TORONTO

Dr. L. Siegel **$ 61,333**

Early identification of learning disabilities using brainstem auditory evoked responses, perinatal, and demographic factors
This study will examine the hypothesis that children who are at risk for learning difficulties at school can be recognized earlier in life by examining their medical history, audiological and neurological data, as well as data from early linguistic and cognitive evaluations.

QUEEN STREET MENTAL HEALTH CENTRE, TORONTO

Dr. E. Collins,
Dr. G. Awad **$ 46,875**

A randomized controlled trial of a low dose neuroleptic strategy in patients with treated refractory schizophrenia
One third of patients who suffer from schizophrenia do not respond well to drug treatments, even at high doses, and remain disabled by chronic symptoms. This investigation is an attempt to find out if patients who are refractory will respond well to gradual dose reduction and maintenance on low doses.

ROTMAN RESEARCH INSTITUTE, BAYCREST HOSPITAL

Dr. D. Stuss **$ 69,176**
$ 16,672

Frontal lobe functions
The objectives of this proposal are to advance our theoretical knowledge of the role of the prefrontal lobes and to provide details which are necessary to improve the rehabilitation effort that is put into patients with lesions of the frontal lobes. The frontal lobes are known to be concerned with high mental functions and damage of these areas, which often occurs in traumatic injuries, may have important consequences for an individual.

Dr. D. Stuss **$ 13,596**

Computer system, video card, colour video monitor
A major equipment grant for computer and auxiliary devices was made to Dr. Donald Stuss at the Baycrest Centre. The computer will be used in experiments to control reaction times and to record responses.

Dr. M. Freedman **$147,719**

L-Deprenyl Study
The purpose of this study is to investigate the efficacy and safety of the drug L-Deprenyl in the treatment of patients with dementia of the Alzheimer's type (DAT).

SUNNYBROOK MEDICAL CENTRE, TORONTO

Dr. S. Black **$ 50,000**

Attentional deficits after hemisphere stroke: a prospective behavioural -

neuroimaging correlation study of the neglect syndrome
This study is designed to find out the basis of the Neglect Syndrome in patients with brain lesions, and to establish if it is due to decreased overall arousal or to bias in the way in which people direct their attention to different parts of their surroundings.

Dr. P. Marton **$ 61,548**

Persistence of deficits in social skills, peer networks and friendship quality in clinically depressed adolescents
Depressive disorders may affect as many as 30% of adolescent psychiatric outpatients. This investigation is designed to find out more about psychological deficits which are specific to the depressed adolescent and to find out if any persist after the remission of the depression itself.

TORONTO WESTERN HOSPITAL

Dr. P. Carlen **$ 58,257**

Altered sedative-hypnotic drug responses and excitable membrane properties of neurons from aged compared to younger mature rats
The aim of this investigation is to examine, in an animal model, the neurobiological basis of age-related drug phenomena - particularly pharmacodynamic changes - which can be attributed to age-related alterations in neurotransmitters and cell membrane properties.

TORONTO GENERAL HOSPITAL

Dr. S. Kennedy, **$ 14,935**
Dr. G. Brown

Melatonin response to noradrenergic challenge tests
Melatonin is related to a set of neurotransmitter terminals in the pineal gland. In this investigation melatonin will be examined in a group of normal subjects. Once normal function is understood it will be possible to examine the function of melatonin in patients with a depressive disorder.

Dr. G. Rodin, **$ 43,592**
Dr. C. Littlefield

Predicting adjustment and psychosocial morbidity in the medically ill
This investigation comprises two studies. The first is designed to further our understanding of how people adapt to chronic medical illness. The second part of the study aims to improve the prediction of the occurrence of depression in patients with medical illness.

Dr. B. Shaw **$ 45,726**

Social phobia: comorbidity, treatment and prevention of impairment
The research seeks to describe individuals who have social phobia and to determine whether cognitive behavioural group treatment is an effective treatment for this disorder.

Dr. D. Woodside **$ 37,879**

Familial transmission of eating disorders
This investigation seeks to elucidate genetic mechanisms underlying the eating disorders: anorexia and bulimia. It will be necessary to find families which can provide information for genetic linkage by carrying out detailed examination to ascertain the presence or absence of eating disorders in more than one family member.

Dr. D. Woodside **$ 5,202**

MVE XLC L30 liquid nitrogen container, roller base plus inventory system
A major equipment grant has been made to Dr. Woodside at the Toronto General Hospital to buy a liquid nitrogen container. This equipment is necessary to cryopreserve viable nucleated cells from peripheral blood specimens collected during the course of genetic investigations.

UNIVERSITY OF TORONTO

Dr. A. Bassett, $ 74,682
Dr. D. Sidenberg

Genetic linkage analysis of schizophrenia in Canadian families: Ontario pilot project
The hypothesis underlying this study is that a single gene, or a limited number of genes, predispose individuals to schizophrenia. The hypothesis will be tested by examining occurrence of the disease in families where at least two members are affected.

Dr. D. McLachlan, $ 23,305
Dr. P. St. George-Hyslop

Molecular studies in Alzheimer's disease
The purpose of this study is to pinpoint a mutation in chromosome 21 which may be responsible for the familial form of Alzheimer's disease. This study will collect pedigrees which show the familial form Alzheimer's disease and will then examine features of chromosome 21 collected from blood cells from family members.

Dr. T. Morley $ 50,000

Canadian Brain Tissue Bank
The Canadian Brain Tissue Bank is an important research resource for Canadian neuroscientists. The staff of the Bank collect brain tissue at autopsy from individuals who are known to have suffered from psychiatric and neurological diseases; the bank provides a store house for the tissue which can be used in the investigation of neuropathologies.

Dr. P. Seeman $ 97,125

Dopamine receptors in schizophrenia: a program approach
Dr. Seeman is carrying out a systematic examination of the neurotransmitter dopamine in relation to schizophrenia. Dr. Seeman proposes that an abnormality in brain dopamine D_1 and D_2 receptors causes the disorder.

YORK UNIVERSITY

Dr. W. Heinrichs $ 37,846

Cognitive predictors of employability and social adjustment in chronic psychiatric patients
Dr. Heinrichs seeks to understand how difficulties of cognition influence the rehabilitation and adjustment of severely disturbed psychiatric patients.

Dr. D. Pepler $ 67,000

Social skills training with aggressive children: an investigation of behavioural change
Aggressive children are given three different kinds of training; social skills training; parent training; and classroom contacts. The objective is to find ways of improving training of socially aggressive children so that they can get on better with their comrades and to find out how the skills they are taught in the classroom can be made to generalise to the playground.

UNIVERSITY OF WATERLOO

Dr. K. Rubin $ 3,924

The Waterloo longitudinal project: an adolescent follow-up
The main purpose of this study is to examine the long-term outcomes of social withdrawal, aggression and peer rejection in early and middle childhood.

INDIVIDUAL AWARDS 1990-91

UNIVERSITY OF GUELPH

Senior Research Fellow

Dr. B. Gottlieb

The impact of respite/daycare on the burdens, mental health, and social support of the caregivers of persons with dementia

Dr. Gottlieb is examining the effect of day care programs for the frail elderly and for those who suffer from dementia. Day care programs offer respite to family caregivers but these programs vary in the total amount and timing of the respite which is provided. The objective of this study is to determine the impact of varying levels of respite on caregivers.

MCMASTER UNIVERSITY, HAMILTON

Research Associates

Dr. R. Mishra

Studies on the mechanism of modulatory effect of PLG on dopamine receptors in CNS

The long-term objective of Dr. Mishra's research is to obtain a better understanding of the way in which a group of chemical messengers modulate the activity, in the brain, of receptors on cell surfaces which react to one neurotransmitter: dopamine. It is known that dopamine is an important substance in the causation of both mental and movement disorders.

Dr. M. Pisa

Behavioural disorders in experimental degenerations of the basal ganglia: characterization, localization and treatment

Dr. Pisa is carrying out basic research into the anatomical and bichemical basis of the major psychoses. An emerging concept based upon recent scientific work is that seemingly unrelated disorders, for example, schizophrenia, affective disorder, Huntington's disease, and Parkinson's disease have a common anatomical and biochemical basis.

Dr. J. Seggie

A pineal-retinal-hypothalamic theory of depression

Dr. Seggie is a neuroendocrinologist whose research relates to the way in which brain hormones regulate brain activity and consequently behaviour. The current thrust of her research is to examine a theory of depression which takes account of the activity of the pineal gland and visible changes in the retina.

Dr. H. Szechtman

Dopamine and sensory attentiveness

Dr. Szechtman is carrying out an investigation into the role of the dopamine system in both normal and abnormal behaviour. His investigations are carried out by examining the movement responses of animals under the influence of different drugs which modulate the dopamine system. The drugs he examines are used as treatments for major psychoses in human subjects.

Long-Term Fellow

Dr. P. Szatmari

Developmental neuropsychiatry

Dr. Szatmari is carrying out an analysis of the follow-up data from the Ontario Child Health Study; the children originally seen in the study have been examined again and thus it is possible to find out something about the natural history of children's psychiatric disorders. Dr. Szatmari is also carrying out an investigation of the genetics of autism.

Post-Doctoral Fellows

Dr. D. Ciliska

Evaluation of "health weight" group education program for young females, grades 6-8

Dieting has become a norm for young women and dieting is a risk factor for the development of eating disorders. The purpose of Dr. Ciliska's investigation is to test a group education program about healthy weight for girls in grade 6 to 8. The question at issue is: can one improve weight control by a method which does not depend upon dieting?

Dr. E. Lipman

Economic disadvantage and child psychiatric morbidity
It is not clear how economic disadvantage produces an increase in psychiatric disorders among poor children. The aim of Dr. Lipman's research is to increase our understanding of the relations between economic disadvantage and psychiatric disorder in children.

Dr. C. Whelton

Effect of renal clearance on circadian rhythm of homovanillic acid in normal controls and schizophrenic patients
Dr. Whelton is examining the effects of plasma homovanillic acid upon the activity of dopamine in the brain. It is thought that brain dopamine is important in the causation of schizophrenia.

Senior Research Fellow

Dr. B. Levy

Diagnosis and treatment of deficits in reading related skills
The purpose of Dr. Levy's research is to investigate two remedial techniques that successfully increase measures of reading in poor readers who have had difficulty in primary school classes. While the techniques are known to be successful in producing benefits in the experimental situation, experimenters have not been able to show that these benefits transfer to the classroom.

Travelling Fellow

Dr. H. MacMillan

Prevention and treatment of child abuse
Dr. MacMillan will be trained in research techniques in child psychiatry. Her investigations are directed towards the prevention and treatment of child abuse; in addition to her studies at Harvard University she will direct an investigation in Hamilton intended to prevent child abuse.

UNIVERSITY HOSPITAL, LONDON

Long-Term Fellow

Dr. S. Brudzynski

Involvement of the central cholinergic system in regulation of behaviour
Dr. Brudzynski's research is focussed on the role of the cholinergic system in both normal and abnormal behaviour. This neuro-chemical system is known to be disordered in a number of diseases which are marked by both affective and cognitive changes.

UNIVERSITY OF OTTAWA

Research Associate

Dr. R. Pivik

Electrophysiological correlates of psychosis/electrophysiological studies of childhood disorders/developmental studies of arousal thresholds during sleep/neurophysiological studies of sleepwakefulness and tonic immobility in the rabbit
Dr. Pivik is carrying out investigations of sleep and wakefulness in animals and children; part of this investigation is directed towards the activity of hyperactive children. In addition, he is carrying out investigations into the physiological changes which take place in psychotic disorders. The aim is to establish a physiological marker for schizophrenia.

Long-Term Fellow

Dr. E. Grof

Neuroendocrinology of affective disorders
Dr. Grof examines the neuroendocrine responses which are associated with the recurrence of disorder in individuals who had apparently recovered from a depressive illness.

New-Faculty Fellow

Dr. V. Whiffen

Depressive mothering and child psychopathology
Dr. Whiffen is carrying out an investigation of mother/infant pairs in which the mother suffers from depression. This research is an attempt to specify the process by which the maternal behaviour of depressed women is linked to child psychopathology.

Travelling Fellow

Dr. G. LaFleche

Frontal lobe deficits in dementia of the Alzheimer-type psychiatric symptoms in dementia of the Alzheimer-type neuropsychological correlates of non-diseased aging
Dr. LaFleche is learning research techniques in neuropsychology at Harvard University Medical School. She is interested in changes in behaviour which are found when there is damage to the frontal lobes in Alzheimer's diseases.

CLARKE INSTITUTE OF PSYCHIATRY, TORONTO

Research Associate

Dr. G. Brown

Studies of indolealkylamines and psychoendocrinology of schizophrenia, anorexia nervosa and affective disorders
Dr. Brown's research activities are centered on neuroendocrine mechanisms in relation to behaviour, that is to say, the way in which chemical messengers operate in the nervous system to control the behaviour of individuals. His principle focus of interest is the investigation of the pineal gland and the hormones which it secretes.

Senior Research Fellow

Dr. R. Joffe

Thyroid hormones and antidepressants
Dr. Joffe is examining tricyclic drugs in the treatment of depressive disorders. There is sometimes considerable delay in the onset of therapeutic effects once these drugs are given; the aim of the study is to carry out a trial of an additional drug which is thought to accelerate the onset of therapeutic actions.

Post-Doctoral Fellow

Dr. P. Fletcher

Brain serotonin and disorders of impulse control
Abnormal metabolism of serotonin has been implicated in eating disorders, anxiety states, obsessive compulsive disorders, suicide. The diversity of these disorders suggests that different subsystems of the serotonin system may be altered in each case. Dr. Fletcher is examining the role of brain serotonin in these disorders.

HOSPITAL FOR SICK CHILDREN, TORONTO

Post-Doctoral Fellows

Dr. N. Benson

Transfer of learning deficits in dyslexic children
Dr. Benson, and others, are carrying out an investigation designed to find ways in which training can be improved so that the trained individuals carry the advantages of training with them from the training ground to the classroom.

Dr. R. Tannock

Dose response effects of methyphenidate on cognitive flexibility in hyperactive children
Hyperactive children, treated by medication, are often described as over-focussed and are thought to have a decreased ability to shift their

attention. Consequently a disadvantage of the treatment may be a reduction in cognitive ability; Dr. Tannock is investigating the effects of stimulant medication upon cognitive performance.

Research Scholar

Dr. J. Finegan

Prenatal testosterone and postnatal behaviour and cognition: a statement of proposed research
The sex hormones, which determine if a fetus will develop as male or female may "sensitive" the developing brain for a range of behaviours and abilities. Dr. Finegan examines children whose testosterone levels were measured during pregnancy to see if there is an association between abilities and different levels of prenatal testosterone.

Senior Research Fellow

Dr. R. Schachar

Dose-response effects of methylphenidate on the focus of attention in hyperactive children
Dr. Schachar is investigating the effect of stimulant drugs on attentional focus. A narrowed focus of attention could be beneficial if it excluded irrelevant information but, if attention is narrowed too much, then medication may have adverse effects.

ROTMAN RESEARCH INSTITUTE, BAYCREST HOSPITAL, TORONTO

Conference Programme

Dr. D. Stuss

Frontal lobe dysfunction in neurological and psychiatric disorders
The Foundation provided support for a conference which was held in Toronto by the Rotman Research Institute of Baycrest Centre on the topic "Frontal lobe dysfunction in neurological and psychiatric disorders." (March 20-22, 1991).

TORONTO GENERAL HOSPITAL

Long-Term Fellow

Dr. C. Littlefield

Predicting adjustment and psychopathology in the medically ill
Dr. Littlefield has initiated several studies to identify factors which predict individuals who are most at risk for psychological disturbance when they suffer a medical illness. One of the objects of the investigation is to find out the extent to which psychological disorders, such as depression, occur in individuals who are medically ill.

Post-Doctoral Fellow

Dr. M. Olmsted

Predictors of response to cognitive behaviour therapy for major depressive disorder: extent of response and speed of recovery
Dr. Olmsted is carrying out an investigation to find out the predictors of response to cognitive behavioural therapy in a large sample of depressed patients and to consider the outcomes, so far unstudied, of therapy quality and the speed of initial response to treatment.

TORONTO WESTERN HOSPITAL

Research Fellow

Dr. I. Spigelman

Actions of sedative hypnotic drugs on neuronal ionic channels
Dr. Spigelman is recording the electrical activity of the brain in

animals to further the understanding of the action of sedative and anticonvulsant drugs on nerve cells in the mammalian central nervous system.

UNIVERSITY OF TORONTO

Research Associate

Dr. U. De Boni

Fundamental studies on the etiology of Alzheimer's disease
Dr. De Boni is conducting research into Alzheimer's Disease. His investigations are directed at finding out more about the nature of the filaments which are found in the brain cells of those who have the disease, the role of aluminum in producing dementia and the genetic basis for this disease.

Senior Research Fellows

Dr. P. Seeman

Search for abnormal dopamine receptor linkage or composition in post-mortem brains from patients who had schizophrenia or organic psychosis
Dr. Seeman is carrying out a series of investigations aimed to show that schizophrenia is produced by a disorder of the dopamine system in the brain.

Dr. B. Wheaton

The effects of ongoing stressors on mental health: specification, measurement, and estimation
Dr. Wheaton's investigations are directed to refining the idea of stress which is often thought to be a cause of mental disorders, and to establish measures of stress.

Conference Programme

Dr. H. Skinner

Cross-cultural research in community mental health: enhancing university and community linkages
The Foundation is providing support for a conference to be held at the University of Toronto on the topic "Cross-cultural research in community mental health: enhancing university and community links."

WILFRID LAURIER UNIVERSITY, WATERLOO

Senior Research Fellow

Dr. G. Nelson

An investigation of supportive housing for the chronically mentally disabled in southern ontario
Dr. Nelson is looking into the care and treatment of people with chronic mental disabilities who have been shifted from psychiatric hospitals to community-based programs.

MINISTRY OF COMMUNITY AND SOCIAL SERVICES

UNIVERSITY OF GUELPH

Dr. A. Matthews, Dr. A. Shipsides — $ 30,000

Homemaker services to the elderly: provider characteristics and client benefit.
Homemaker services have developed rapidly and cater primarily to elderly persons. The study will provide information on the training needs of homemakers and on the appropriate role and function of the visiting homemaker programme.

MCMASTER UNIVERSITY, HAMILTON

Dr. C. Cunningham, Dr. J. Davis — $ 46,327

Improving training programmes for residential counsellors of developmentally handicapped persons: mastery modelling versus coping modelling versus coping modelling plus problem solving.
Difficult-to-manage, developmentally-handicapped children are being

transferred from large institutions to community homes. The objective of the proposed study is to improve training programmes for the staff of group homes for developmentally handicapped persons.

Dr. D. Elliott $ 21,442

Cerebral specialization in individuals with Down's syndrome.
The genetic defect associated with Down's syndrome may be responsible for a dissociation between speech perception and movement mechanisms in the brain and may lead to difficulties in the performance of tasks which require coordination between these two mechanisms. This research will provide information useful to educators of children with Down's syndrome.

QUEEN'S UNIVERSITY, KINGSTON

Dr. J. Holden, $ 64,880
Dr. B. White

X-linked mental retardation: the use of DNA markers in mapping disease loci and in carrier assessment
The objective of the proposed study is to map the mutations causing X-linked forms of mental retardation and to establish reliable and accurate diagnostic procedures for the assessment of the carrier status of women at risk for having affected children.

UNIVERSITY OF WESTERN ONTARIO, LONDON

Dr. I. Connidis $ 76,170

Support networks and service needs of older adults: targeting groups at risk
A greater proportion of the population is living to advanced years so it is necessary to obtain data on factors which will influence rates of institutionalisation and the need for additional home support. The focus of this study is adults at risk of being put into homes because their social networks are small (the childless; the single; the divorced/separated; and the widowed).

Dr. H. Polatajko $ 28,300

A clinical trial of the effectiveness of process oriented treatment for children with mild motor problems.
This project will test the hypothesis that process oriented treatment, traditional treatment and no treatment will all have much the same effects upon the performance of children with developmental coordination disorder. Developmental coordination disorder is a relatively new term now applied to children previously diagnosed as "developmental apraxia", "clumsy", etc.

LAKEHEAD UNIVERSITY, THUNDER BAY

Dr. M. Kelley $ 17,803

A study of care options for people currently on waiting lists for long-term institutional care
Phase 1 of the study will involve the collection of data about the daily activities and needs of seniors who are presently on waiting lists for homes for the elderly. The results will be used to improve the quality of life of elderly persons who are waiting for institutional care.

CANADIAN MENTAL HEALTH ASSOCIATION, (ASHLAND INDUSTRIES), LONDON

Dr. C. Smeekens $ 34,970

Vocational interest assessment for people with handicapping conditions.
The objective of this study is to develop a measure which may be used to assess the vocational interests of persons with disabilities. The proposed measure will contain references to work activities that are

characteristically performed by persons with handicapping conditions and will be designed to predict work satisfaction.

HOSPITAL FOR SICK CHILDREN, TORONTO

Dr. M. Lovett, Dr. R. Barron — **$ 72,689**

Computer-based training of literacy skills in hearing-impaired children and adolescents: a controlled evaluation

The objective of the proposed research is to evaluate a computer-based literacy training programme for individuals with moderate to profound prelingual hearing loss. The study will provide information necessary for the development of improved literacy training programmes for hearing-impaired persons.

Dr. S. Marcovitch — **$ 85,761**

Early intervention: help or hindrance? Evaluation of programme, parent and child predictors

Dr. Marcovitch is recruiting subjects with developmental disability to measure the effects of infant stimulation programmes six months and one year after programme participation. She is assessing family life, the childrens' development, and the type of early stimulation.

Dr. S. Marcovitch — **$ 69,025**

Risk factors in the functioning of school-age developmentally handicapped children and their families.

The objective of the study is to determine the etiology of behaviour disorders in developmentally delayed children. The results will be used to analyse if whether children, who now have behaviour disorders, had the most difficult temperaments as preschoolers, the most dysfunctional mother-child relationships and the least family support.

CLARKE INSTITUTE OF PSYCHIATRY, TORONTO

Dr. S. Mackay-Soroka — **$ 57,753**

Communication between mothers and their deaf adolescents.

In families where there is a deaf child, it may be difficult to establish and maintain functional parent-child communication. The study will assess: (a) the exchange of information between deaf adolescents and their mothers, (b) the dominance of one partner over another in the communication process, (c) childrens' and mothers' perceptions of their relationship, and (e) deaf adolescents' socio-emotional adjustment.

METROPOLITAN TORONTO ASSOCIATION FOR COMMUNITY LIVING

Dr. D. Morley — **$ 43,650**

The process of generating and maintaining personal supports for individuals who are developmentally handicapped.

Personal support networks improve the quality of life of developmentally handicapped persons. However, little is known about the procedures necessary for the establishment and maintenance of these networks. The research will provide guidelines for the establishment and maintenance of personal support networks for developmentally handicapped persons.

SURREY PLACE CENTRE, TORONTO

Dr. L. Atkinson — **$ 44,038**

Cognitive and affective adjustment in mothers with Down's syndrome children and quality of attachment

The aim of this study is to discover the features of the attachments formed between parents and children with Down's syndrome and to see how attachments alter between the ages of 21 and 45 months.

Dr. D. Yu, $ 28,686
Dr. M. Feldman

Essential community living skills: validation of a criterion-referenced assessment for moderately and mildly developmentally handicapped persons.
There has been an increase in the number of developmentally handicapped persons being served in community settings. Developmentally handicapped persons can be taught to perform a variety of domestic and community living skills. The objective of this study is to validate an instrument designed to assess essential community living skills of moderately and mildly developmentally handicapped persons.

THISTLETOWN REGIONAL CENTRE, TORONTO

Dr. A. Perry, $ 5,379
Dr. D. Factor

Stress and family functioning in parents of girls with Rett syndrome.
Rett syndrome is a severe neuro-degenerative disorder which affects females. The objective of the proposed study is to determine the final cognitive level of children with Rett syndrome and to assess the services and supports necessary for families of Rett syndrome children.

UNIVERSITY OF TORONTO

Dr. C. Rosenthal $ 14,260

Factors influencing elderly wives' "resources role", in institutional settings.
This research examines the quality of life of elderly men residing in institutions and also the quality of life and the stress imposed upon family care-givers, (particularly the wives). The extent to which institutions can rely upon "informal" care will have important economic consequences in dealing with an increasing population of elderly people.

YORK CENTRAL HOSPITAL, TORONTO

Ms. D. Griffiths $ 61,948

Evaluation of a positive programming approach to the treatment of severe behaviour disorders in persons with developmental disabilities.
Ms. Griffiths designed a non-punitive treatment package designed to control maladaptive behaviour and to maintain acceptable behaviour in individuals with developmental disabilities. She is carrying out a long term investigation of the extent to which non-punitive treatment leads to an improvement in behaviour.

Coopers
& Lybrand

chartered accountants

5160 Yonge Street
North York Ontario
Canada M2N 6L3

telephone (416) 224-2140
telex 06-23590
fax (416) 224-2356

a member firm of
Coopers & Lybrand (International)

AUDITORS' REPORT TO THE MEMBERS OF THE FOUNDATION AND THE PROVINCIAL AUDITOR

We have audited the balance sheet of The Ontario Mental Health Foundation as at March 31, 1991 and the statements of operations, changes in operating fund, changes in endowment fund, changes in M.C.S.S. fund, changes in the L-Deprenyl fund and changes in the Ontario Health Supplement fund for the year then ended. These financial statements are the responsibility of the Foundation's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Foundation as at March 31, 1991 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles.

Coopers & Lybrand

Chartered Accountants

June 26, 1991

The Ontario Mental Health Foundation

Balance Sheet as at March 31, 1991

	1991	1990
Assets		
Current Assets		
Cash and short-term investments - at cost, which approximates market, plus accrued interest	$ 4,807,615	$ 4,238,284
Grants receivable	460,006	-
Advances to grantees (note 2)	330,580	582,085
Unspent awards receivable (note 3)	19,793	57,404
Other accounts receivable (note 4)	23,571	24,709
Prepaid expenses	457	603
	5,642,022	4,903,085
Fixed Assets		
Furniture and fixtures - at cost	59,555	77,919
Less: Accumulated depreciation	29,103	39,367
	30,452	38,552
Total Assets	$ 5,672,474	$ 4,941,637
Liabilities		
Current Liabilities		
Research and equipment grants, fellowships and associateships payable	$ 471,707	$ 359,660
Accounts payable and accrued liabilities	98,410	20,401
	570,117	380,061
Equity		
Operating Fund	1,268,161	900,168
Endowment Fund (note 5)	2,345,343	2,079,993
M.C.S.S. Fund - Held in Trust (note 6)	665,154	391,117
L-Deprenyl Fund (note 7)	736,938	794,462
Ontario Health Supplement Fund (note 8)	86,761	395,836
	5,102,357	4,561,576
Total Liabilities and Equity	$ 5,672,474	$ 4,941,637

APPROVED BY THE FOUNDATION

Chairman

Vice-Chairman

The Ontario Mental Health Foundation

Statement of Operations

For the year ended March 31, 1991

	1991	1990
Revenue		
Province of Ontario	$ 3,292,600	$ 3,332,714
Investment income	185,760	151,952
Donations (note 9)	31,687	33,646
Other income	4,920	-
	3,514,967	3,518,312
Expenditure		
Awards -		
Research grants	1,863,170	1,711,410
Major equipment	25,856	1,029
Research associateships	327,893	352,975
Research scholarships	32,440	92,080
Fellowships		
Long-term	90,265	145,583
Research	369,122	345,923
New faculty research	11,387	-
Publications	2,423	-
Training awards	66,487	59,064
Research studentships	-	67,770
In-house research	500	1,500
Conferences and workshops	6,917	19,101
	2,796,460	2,796,435
Administration (schedule of expenses)	290,043	275,838
Committee meetings	60,471	56,757
	3,146,974	3,129,030
Excess of Revenue over Expenditure for the Year	$ 367,993	$ 389,282

Coopers & Lybrand

The Ontario Mental Health Foundation

Statement of Changes in Operating Fund

For the year ended March 31, 1991

	1991	1990
Balance - Beginning of Year	$ 900,168	$ 510,886
Excess of Revenue over Expenditure for the Year	367,993	389,282
Balance - End of Year	$ 1,268,161	$ 900,168

Statement of Changes in Endowment Fund (note 5)

For the year ended March 31, 1991

	1991	1990
Balance - Beginning of Year	$ 2,079,993	$ 1,866,472
Investment Income	265,350	213,521
Balance - End of Year	$ 2,345,343	$ 2,079,993

Statement of Changes in M.C.S.S. Fund - Held in Trust (note 6)

For the year ended March 31, 1991

	1991	1990
Balance - Beginning of Year	$ 391,117	$ 222,579
Grants	1,264,565	1,144,876
Investment Income	33,654	60,647
	1,689,336	1,428,102
Research Grants	1,024,182	1,036,985
Balance - End of Year	$ 665,154	$ 391,117

Coopers &Lybrand

The Ontario Mental Health Foundation

Statement of Changes in L-Deprenyl Fund (note 7)

For the year ended March 31, 1991

	1991	1990
Balance - Beginning of Year	$ 794,462	$ 795,200
Investment Income	90,195	93,219
	884,657	888,419
Research Grants	147,719	93,957
Balance - End of Year	$ 736,938	$ 794,462

Statement of Changes in Ontario Health Supplement Fund (note 8)

For the year ended March 31, 1991

	1991	1990
Balance - Beginning of Year	$ 395,836	$ -
Grant Received	1,300,000	500,000
Investment Income	55,076	21,745
	1,750,912	521,745
Expenditures	1,664,151	125,909
Balance - End of Year	$ 86,761	$ 395,836

The Ontario Mental Health Foundation

Notes to Financial Statements

For the year ended March 31, 1991

---

1. Depreciation

Depreciation of furniture and fixtures is calculated using the declining balance method at an annual rate of 10%.

2. Advances to Grantees

Certain projects are approved for funding for more than one fiscal year. Advances to grantees represent unspent funds from the current year's award which are to be carried forward and added to the following year's award.

3. Unspent Awards Receivable

Unspent awards receivable represent unspent funds at the time a project ends. Grantees are required to return this money to the Foundation.

4. Other Accounts Receivable

The Foundation incurs costs in the administration of the M.C.S.S. fund which are directly reimbursed by the M.C.S.S. This amount represents the balance owing to the Foundation.

5. Endowment Fund

The endowment fund has arisen through bequests to the Foundation. The assets of the fund at March 31, 1991 comprised cash and short-term investments of $2,345,343 (1990 - $2,079,993).

6. M.C.S.S. Fund - Held in Trust

In 1986 the Ministry of Community and Social Services (M.C.S.S.) through an Order-in-Council was awarded an interprovincial lottery allocation for 1986 - 1987 and beyond. These funds are used to support applied research and program evaluation studies related to the handicapped and the elderly over a five year period. The Foundation administers these funds under agreement with the Ministry.

6. M.C.S.S. Fund - Held in Trust - (Cont'd)

The net assets of the fund at the balance sheet date comprise:

	1991	1990
Cash and investments at cost	$ 197,977	$ 111,337
Grants receivable	460,006	-
Advances to grantees	46,038	274,973
Unspent awards receivable	16	17,870
	704,037	404,180
Less: Grants payable	38,883	13,063
	$ 655,154	$ 391,117

7. L-Deprenyl Fund

The Ministry of Health provides the Foundation with funds exclusively to cover the costs of new research into the effects of L-Deprenyl on Alzheimers Disease. The assets of this fund at March 31, 1991 comprised advances to grantees and short-term investments of $736,938 (1990 - $794,462).

8. Ontario Health Supplement Fund

The Ministry of Health provides the Foundation with funds exclusively to cover the costs of conducting and administering the Ontario Mental Health Survey. The assets of this fund at March 31, 1991 comprised cash and short-term investments of $86,761 (1990 - $395,836).

9. Donations

Donations are recorded when received by the Foundation and are used in the support of research as directed by the members of the Foundation.

10. Award Commitments

The Foundation has made commitments of approximately $6,239,000 to fund projects over the next three fiscal years as follows:

1991/1992	$ 3,229,000
1992/1993	1,941,000
1993/1994	1,069,000

11. Operating Lease

The minimum annual lease payments under an operating lease for the premises are as follows:

1991/1992	$ 45,011
1992/1993	45,011
1993/1994	45,011
1994/1995	52,107
1995/1996	57,176
Thereafter	195,351
	$ 439,667

Schedule of Expenses

For the year ended March 31, 1991

	1991	1990
Administration		
Salaries	$ 194,984	$ 219,778
Employee benefits	18,175	18,491
Office expenses	74,363	50,583
Rent	44,281	37,314
Consultants' fees and expenses	8,345	2,006
Audit and legal	7,155	9,835
Telephone	6,432	6,267
Depreciation - office furniture and fixtures	4,072	3,712
Reimbursed by M.C.S.S.	(67,764)	(72,148)
	$ 290,043	$ 275,838

MAJOR DONORS FROM APRIL 1, 1990 TO MARCH 31, 1991

In 1990-91 the Foundation received a total of $31,687.00 in donations. The Foundation wishes to put on record its gratitude to all those who provided funds to support the Foundation's work. Donations are used to support current research; thus they enable the Foundation to carry projects which otherwise would not be completed.

BIRKETT, C. W.

DOFASCO

GREENWIN PROPERTY MANAGEMENT

THE RUTH SCHWARTZ FOUNDATION

The Ruth Schwartz Foundation is interested in research which will provide new knowledge about what contributes to emotional disturbances in children.

A donation from the Ruth Schwartz Foundation, together with funds provided by the Ontario Mental Health Foundation, is supporting a study entitled: "Intergenerational transmission of attachment" at Queen's University. Dr. Diane Benoit is the principal investigator; this study is due to be completed in September 1991.

THE VELLEMAN FOUNDATION

The Velleman Foundation was incorporated in 1974 in honour of Leonard and Leonora Velleman. The Vellemans dedicated themselves to the care and treatment of severely mentally retarded infants and in 1951 established the Ontario Home for Mentally Retarded Infants. This facility is now known as the Plainfield Children's Home and is located in the community of Plainfield, a few miles north of Belleville, Ontario. The objectives of the Velleman Foundation are simple and clear; within the field of mental retardation to support programmes and initiatives both of individuals as well as of groups; to extend research and education; and to provide supplementary assistance in special cases.

The Velleman Foundation has given a donation to the Foundation which will enable Dr. Arthur Dalton to continue a longitudinal study of the risk factors associated with Alzheimer's disease and dementia in older persons who suffer from Down's syndrome and who live in Ontario. This project has been under way since 1972 and is based upon repeated observations of 18 cases.

....

The Ontario Mental Health Foundation is a charitable Foundation. Registration No. 0370494-11-13. Donations to further research into the causes of mental illness and for the development of improved treatments are needed, and may be sent to:

Ontario Mental Health Foundation
365 Bloor Street East
Suite 1708
Toronto, Ontario
M4W 3L4

Receipts will be issued for income tax purposes.